

**AMENDMENTS IN THE CLAIMS:**

Please amend claims 37, 39 and 41 as follows:

1 37. (Twice Amended) A method for scrambling input data, comprising the steps of:

generating scramble data having a value which is randomly determined;

generating a pseudo-random number sequence in accordance with the value of the scramble data; and

generating scrambled data by performing a logical operation on the pseudo-random number sequence and said input data.

2 39. (Amended) A method for recording information onto a recording medium, comprising the steps of:

generating scramble data having a value which is randomly determined;

generating a pseudo-random number sequence in accordance with the value of the scramble data;

generating scrambled data by performing a logical operation on the pseudo-random number sequence and input data; and

recording the scramble data and the scrambled data onto the recording medium.

3 41. (Amended) A recording medium for recording information thereon, wherein scramble data and scrambled data are recorded onto the recording medium,

the scramble data has a value which is randomly determined,

and the scrambled data is obtained by generating a pseudo-random number sequence in accordance with the value of the scramble data and by performing a logical operation on the pseudo-random number sequence and input data.

Please add claim 43 as follows:

43. (Added) A method according to claim 37, further comprising the steps of:

modulating the scrambled data;

obtaining a calculated value of representing a difference between a number of 0 bits and a number of 1 bits included in the modulated scrambled data;

determining whether or not a variation of the calculated value has exceeded a predetermined threshold value;

newly generating further scramble data having a value which is randomly determined;

newly generating a further pseudo-random number sequence in accordance with the value of the newly generated scramble data; and

newly generating further scrambled data by performing the logical operation on the newly generated pseudo-random number sequence and the input data.